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State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

6809

September 2, 2015

David McMullin
C.S. Mining LLC
P.O. Box 608
Milford, Utah 84751

Subject: Initial Review of Amended Notice of Intention to Commence Large Mining Operations, C.S. Mining LLC, Hidden Treasure Mine, M/001/0067, Beaver County, Utah

Dear Mr. McMullin:

The Division of Oil, Gas and Mining has reviewed the referenced and amended Notice of Intention to Commence Large Mining Operations (Notice) which was received August 28, 2015. The amendment request consists of plans to construct the Copper Ranch intermediate pit and a waste rock dump.

The following comments need to be addressed before the Division can issue conditional approval to begin stripping alluvium:

- 1) Page XVI-10, para 7 – Identify any projected impacts caused by intercepting the defined drainage with the intermediate pit, and any mitigation plans (such as diversion), as needed. (pnb)
- 2) Page XVI-13, Omission – Identify the extent to which the intermediate pit (and the drainage which it intercepts) by will be reclaimed. (pnb)

The remaining enclosed comments will need to be addressed prior to full approval of the amendment.

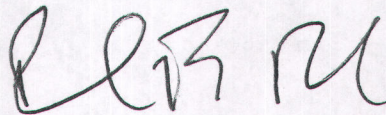
The Division has not completed its review of your recent request for a variance to allow terracing as a final dump configuration because we understand that the Copper Ranch intermediate pit permitting action is a higher immediate priority. Without an approved variance, the Division can only approve amendments and reclamation sureties that are consistent with standard reclamation practices of R647-4. An approval to begin stripping alluvium will need to be conditional upon compliance with R647-4.



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If you have any questions in this regard please contact Peter Brinton at 801-538-5258 or me at 801-538-5261. Thank you for your cooperation in completing this permitting action.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. B. Baker'.

Paul B. Baker
Minerals Program Manager

PBB: pnb: eb
Attachment: Review
SHPO Letter
cc: Ed Ginouves, BLM-Cedar City (UTU-82071); eginouve@blm.gov
P:\GROUPS\MINERALS\WP\M001-Beaver\M0010067-HiddenTreasure\final\REV1-6809-09022015.docx

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**Initial REVIEW OF NOTICE OF INTENTION
TO COMMENCE LARGE MINING OPERATIONS
CS Mining LLC
Hidden Treasure Mine
M/001/0067
September 2, 2015**

General Comments:

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	General	Note: The variance request for alternate reclamation treatments for the Copper Ranch and other waste dumps is still being considered by the Division. The approved Notice will need to reflect the codified reclamation standards as long as a variance is not approved.	pnb	

R647-4-104 – Operator Information and Surface and Mineral Ownership

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Omission	Please reference the approved Notice for the surface and mineral ownership and owner contact information.	pnb	

R647-4-105 - Maps, Drawings & Photographs

105.2 - Surface facilities map

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Figure N-1	The lines appearing to be contours for the pit and road appear to be incorrectly labeled. Correct the contours or contour labels.	pnb	
	Figure N-1	Show the locations of the CRM holes referenced in Table N-2.	pnb	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Figure N-2	Show the original alignment of the county road, and identify the reclamation treatments applied to it.	pnb	
	Figure N-2	Note: As noted above, the variance request for alternate reclamation treatments for the Copper Ranch and other waste dumps is still being considered by the Division. Maps and plans will need to reflect the codified reclamation standards as long as a variance is not approved.	pnb	
	Figure N-2	Identify the locations of permanent berms to be built around the pit crests.	pnb	

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R647-4-106 - Operation Plan

106.2 - Type of operations - mining method, onsite processing, deleterious or acid-forming materials

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Omission	Provide a geotechnical report for highwalls steeper than 45 degrees as an appendix to the Notice, and summarize the findings in the Notice.	pnb	

106.4 - Nature of materials mined or processed (including waste materials), and estimated annual tonnages

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Page XVI-8, Omission	Oxidation of waste dump material will occur regardless of exposure to water, though perhaps at different rates. Mobilization would be more likely to occur in the presence of water. Correct or qualify the statement that for oxidation to occur, a continuous flux of water would be required.	pnb	
	Page XVI-8, Omission	Indicate whether waste rock should be considered deleterious or not, considering the results of waste rock testing.	pnb	
	Page XVI-8, Omission	Indicate whether ore or tailings should be considered deleterious or not, based on the analyses provided. Justify the lack of static leach analyses (such as SPLP) for tailings. Evaluation of elemental analyses results using Geochemical Abundance Index (GAI) is an example of a method that could be used to justify the existing sampling and analyses.	pnb	
	Page XVI-7	Note: Depending on site-specific geochemical conditions, the use of fewer composite samples for future permitting may not be acceptable. Instead, analyses of individual samples may be needed, since composites mask the variability of geochemical characteristics for each rock type, and since the sizes of the aliquot samples used to generate a composite are not identified. Contact the Division for more information.	pnb	

106.5 - Existing soil types, location, amount

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	XVI-9, para 1	Note: Topsoil should be saved and replaced as part of exploration activities.	pnb	

R647-4-109 - Impact Assessment

109.1 - Projected impacts to surface & groundwater systems

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Page XVI-10, para 7	Since tailings from the Copper Ranch pit will be stored in the Intermediate Tailings Disposal Facility, identify projected impacts associated with milling and tailings placement of Copper Ranch ore (or lack thereof) to groundwater.	pnb	

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Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Page XVI-10, para 7	Identify any projected impacts caused by intercepting the defined drainage with the intermediate pit, and any mitigation plans (such as diversion), as needed.	pnb	

109.4 - Projected impacts on slope stability, erosion control, air quality, public health and safety

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Omission	Discuss projected impacts to slope stability and air quality, or reference the current NOI as applicable.	pnb	
	Omission	Indicate the use of pit berms for both public safety and erosion control.	pnb	

R647-4-110 - Reclamation Plan

110.2 - Reclamation of roads, highwalls, slopes, impoundments, drainages, pits, piles, shafts, adits, etc

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Page XVI-13, para 3	Note: The variance request for alternate reclamation treatments for the Copper Ranch and other waste dumps (terraces with alternating angle-of-repose dump slopes) is still being considered by the Division. Reclamation plans will need to reflect the codified reclamation standards as long as a variance is not approved.	pnb	
	Page XVI-13, Omission	Identify the extent to which the intermediate pit (and the drainage which it intercepts) by will be reclaimed.	pnb	

110.3 - Facilities to be left for post mining use (buildings, utilities, roads, pads, ponds, pits, equipment, etc.)

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Omission	Indicate whether any facilities will be left, including pits.	pnb	

110.4 - Description or treatment/location/disposition of deleterious or acid forming materials, including map

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Omission	Depending on the conclusions to be made in section 106.4, indicate whether any deleterious materials will be left at the site, and under what conditions.	pnb	

R647-4-112 - Variance (List all variances requested and make a finding if approving.)

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Page XVI-13, para 3	Note: The variance request for alternate reclamation treatments for the Copper Ranch and other waste dumps (terraces with alternating angle-of-repose dump slopes) is still being considered by the Division. The amended Notice will need to reflect the codified reclamation standards as long as a variance is not approved.	pnb	